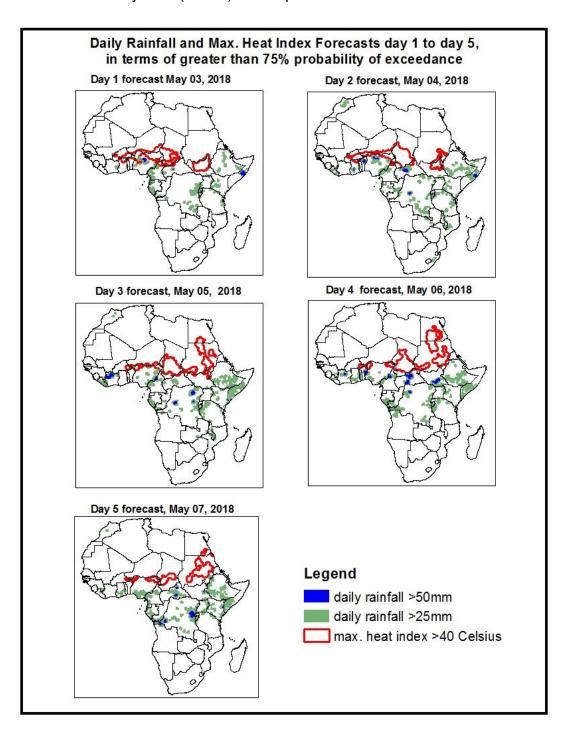
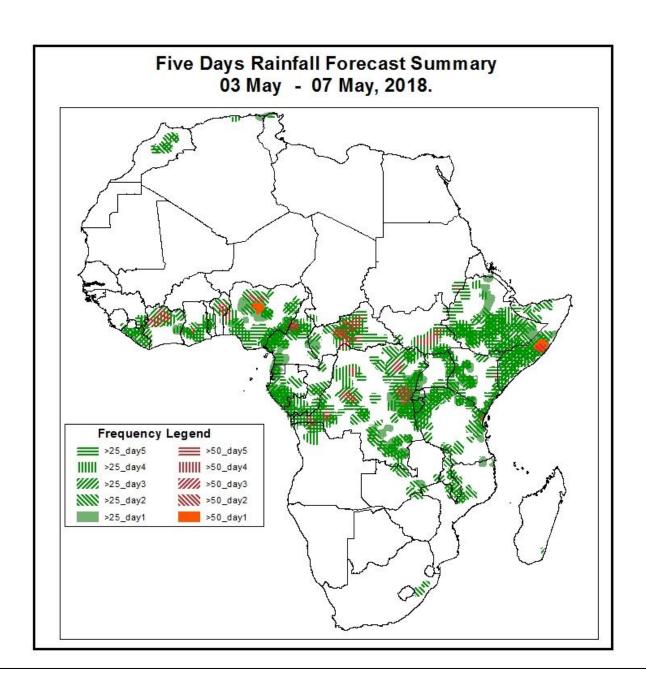
#### 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on May 02, 2018)

## **1.1. Daily Rainfall and Maximum Heat Index Forecasts** (valid: May 03, – May 07, 2018)

The forecasts are expressed in terms of high probability of precipitation (POP) and high probability of maximum heat index, based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



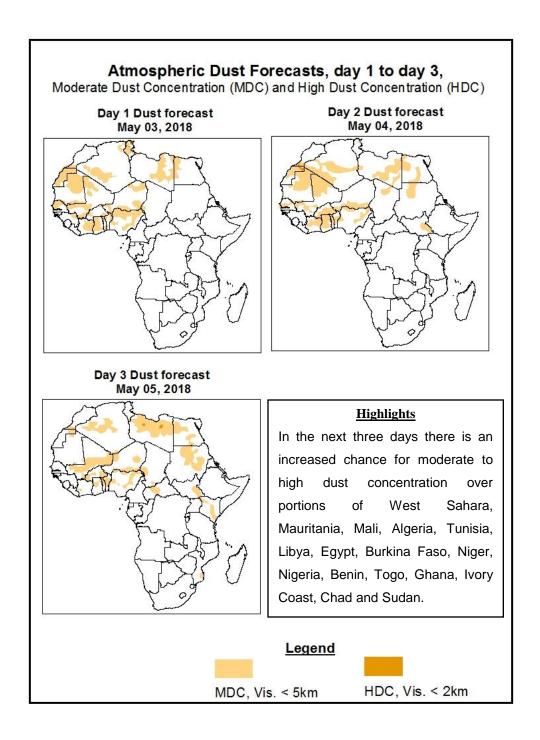


#### <u>Highlights</u>

In the next five days, lower-level convergence across Uganda and South Sudan, lower-level wind divergence near Madagascar, and a low monsoon entrance in West Africa are expected to enhance rainfall in the in eastern part of Africa then a reduction of rainfall in the southern and western part. As a result, there is an increased chance for two or more days of moderate to heavy rainfall over portions of Morocco, Liberia, Ivory Coast, Ghana, Togo, Benin, Nigeria, Cameroon, Equatorial Guinea, Gabon, Congo, DRC, CAR, Malawi, Burundi, Rwanda, Tanzania, Uganda, Kenya, South Sudan, Ethiopia, and Somalia.

# 1.2. Atmospheric Dust Concentration Forecasts (valid: May 03 – May 05, 2018)

The forecasts are expressed in terms of high probability of dust concentration, based on the Navy Aerosol Analysis and Prediction System, NCEP/GFS lower-level wind forecasts and expert assessment.



#### **1.3. Model Discussion,** Valid: May 03 – May 07, 2018

The Azores High Pressure system over the North Atlantic Ocean is expected to weaken during the forecast period. The central pressure values ranges from about 1029 hPa to 1026 hPa during the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to intensify in the first two days and then weaken in the last three days of the forecast period. The central pressure values increases from about 1028 hPa to 1029 hPa and decreases to 1027 hPa during the forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to weaken during the forecast period. The central pressure values ranges from about 1029 hPa to 1023 hPa during the forecast period.

At 925hPa, dry strong northeasterly to easterly wind is expected to prevail across northern Africa and portions of the Sahel region.

At 850hPa, in West Africa, it is expected the oscillation of the Inter Tropical Convergence Zone in the extreme northern part of the Gulf of Guinea countries and a low monsoon entrance while the area of wind convergence remain active in Uganda and South Sudan during the forecast period. A southeastern flow with its associated lower-level divergence is expected to prevail across the northern portions of the Mozambique Channel and northern Madagascar.

In the next five days, lower-level convergence across Uganda and South Sudan, lower-level wind divergence near Madagascar, and a low monsoon entrance in West Africa are expected to enhance rainfall in the in eastern part of Africa then a reduction of rainfall in the southern and western part. As a result, there is an increased chance for two or more days of moderate to heavy rainfall over portions of Morocco, Liberia, Ivory Coast, Ghana, Togo, Benin, Nigeria, Cameroon, Equatorial Guinea, Gabon, Congo, DRC, CAR, Malawi, Burundi, Rwanda, Tanzania, Uganda, Kenya, South Sudan, Ethiopia, and Somalia.

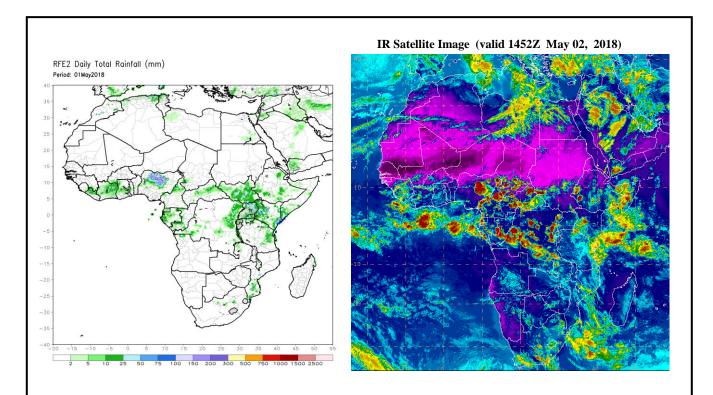
# 2.0. Previous and Current Day Weather over Africa

### **2.1. Weather assessment for the previous day** (May 01, 2018)

Moderate to locally heavy rainfall was observed over parts of Morocco, Algeria, Tunisia, Liberia, Ivory coast, Ghana, Nigeria, Cameroon, Gabon, Congo, Angola, CAR, DRC, Tanzania, Rwanda, Uganda, South Sudan, Kenya, Ethiopia, Somalia and Mozambique.

# **2.2. Weather assessment for the current day** (May 02, 2018)

Intense convective clouds are observed over across most parts of central Africa.



Previous day rainfall condition over Africa (Left) based on the NCEP CPCE/RFE and current day cloud cover (right) based on IR Satellite image.

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